

GAO

Testimony

Before the Subcommittee on VA, HUD, and Independent  
Agencies, Committee on Appropriations,  
U.S. Senate

To Be Released  
at 9:30 a.m., EST,  
Thursday,  
March 23, 2000

# HUMAN CAPITAL

## Observations on EPA's Efforts to Implement a Workforce Planning Strategy



Statement for the Record by  
Peter F. Guerrero  
Director, Environmental Protection Issues,  
Resources, Community, and Economic Development Division

**DISTRIBUTION STATEMENT A**  
Approved for Public Release  
Distribution Unlimited

20000324 089

Mr. Chairman and Members of the Subcommittee:

We appreciate the opportunity to present our observations on the Environmental Protection Agency's (EPA) efforts to determine the workforce it needs to meet its strategic goals and objectives. During the past decade, when most federal agencies reduced their staffing, EPA's workforce grew by about 18 percent, even though the states were assuming more responsibility for carrying out federal environmental programs and enforcement activities. EPA officials attribute much of the growth during this period to additional statutory responsibilities given the agency, such as the Clean Air Act Amendments of 1990. Concerned about such growth, the Congress, in its deliberations on EPA's fiscal year 2000 budget request, expressed its expectation that the agency, while remaining flexible to meet its program requirements, would not exceed a personnel level of 18,000 full-time equivalents (FTE)<sup>1</sup> by the end of fiscal year 2001, a reduction of about 100 FTEs from EPA's estimated level for fiscal year 2000.

This Subcommittee has also expressed concern that increases in EPA's personnel levels may reflect incremental responses to meet the demands of new environmental initiatives, rather than the results of a workforce planning strategy linked to the agency's strategic planning efforts. Such a strategy would identify EPA's current and future human capital needs, including the size of the workforce, its deployment across the organization, and the competencies (knowledge, skills, and abilities) needed to meet the agency's strategic goals and objectives. In response to the Subcommittee's interest in EPA's workforce planning, we reviewed (1) how EPA determines the number of employees and the competencies needed to carry out its strategic goals and objectives and (2) what actions, if any, EPA is taking to improve its workforce planning activities.

---

<sup>1</sup> An FTE represents 2,080 work hours, the equivalent of one person working full time for 1 year.

In summary, our findings are as follows:

- EPA does not now have a workforce planning strategy to determine the number of employees and competencies needed to carry out its strategic goals and objectives. In preparing the agency's annual budget request, EPA assistant administrators, regional administrators, and other senior officials determine the increases or decreases in the FTEs requested by the agency. The senior officials make their decisions on the basis of information provided by program managers, who identify incremental changes in their needs from the prior year. However, EPA does not have the detailed workforce planning information it needs to inform such decisions, including (1) information on the linkage between the FTEs requested and the agency's ability to meet its strategic goals and objectives and (2) any excesses or gaps in needed competencies within the agency's various headquarters and field components. Furthermore, EPA has not assessed the accuracy of its existing data to ensure that its employees are being used in ways that are consistent with the intent of its congressional appropriators.
- Although EPA does not currently have a workforce planning strategy, it has taken steps to identify its current and future human capital needs, including the size and competencies of its workforce. In May 1999, EPA completed a study that identified (1) the competencies needed to meet the agency's current missions, (2) possible alternative missions that EPA may face in the future, and (3) new competencies that may be needed under each of the future mission scenarios. While a step in the right direction, the study was not detailed enough to identify in total or in individual organizational components the number of employees who need to possess the competencies identified. Furthermore, citing budget constraints, EPA discontinued its efforts to implement a workforce planning strategy, which was to include a continuous process to monitor and assess the agency's workforce in light of internal and external changes in its environment. Although EPA currently has no resources designated for implementing a workforce planning strategy, the agency recently prepared a draft human resources strategic plan. According to EPA officials, a

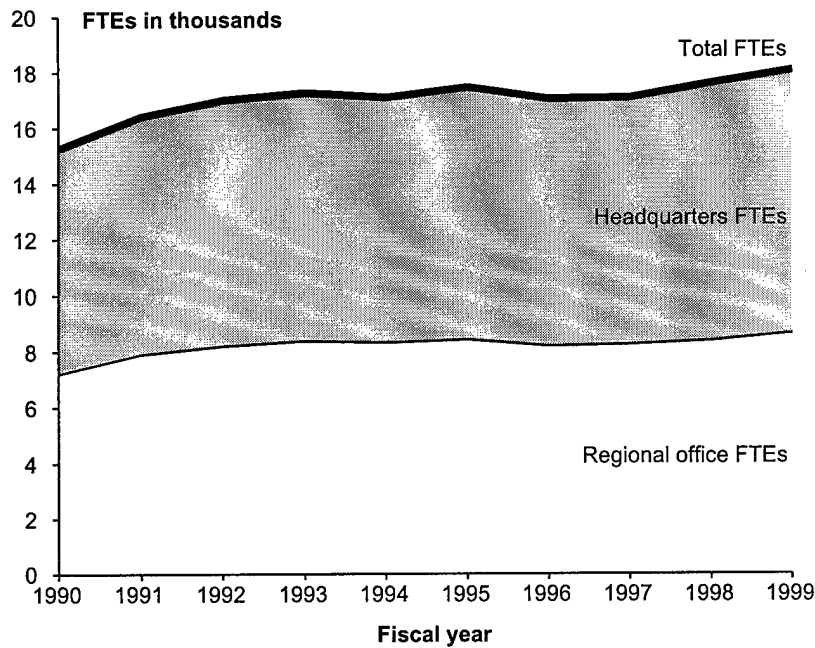
workforce planning strategy would be developed and implemented as part of this plan. EPA officials plan to meet in April 2000 to consider whether to approve the draft plan.

We met with EPA officials, including the Associate Director of EPA's Annual Planning and Budgeting Division, Office of the Comptroller, to discuss this statement for the record. They told us that the information reported is a fair assessment of EPA's workforce planning activities. They provided several technical comments and clarifications, which we incorporated as appropriate.

## **Background**

EPA is organized into 13 major headquarters offices, located in Washington, D.C., that receive administrative, investigative, and laboratory support from various headquarters' field entities located throughout the country. EPA also maintains 10 regional offices to implement federal environmental statutes and to provide oversight of related state activities. While total federal employment was reduced by about 17 percent from fiscal year 1990 through fiscal year 1999, the FTEs available to EPA to carry out its programs grew from 15,277 to 18,078, an increase of about 18 percent. (See fig.1.) Most of the growth occurred from fiscal year 1990 through fiscal year 1993, when the FTEs increased from 15,277 to 17,280, an increase of about 13 percent. Since then, EPA has grown at a more moderate rate, averaging less than 1 percent a year.

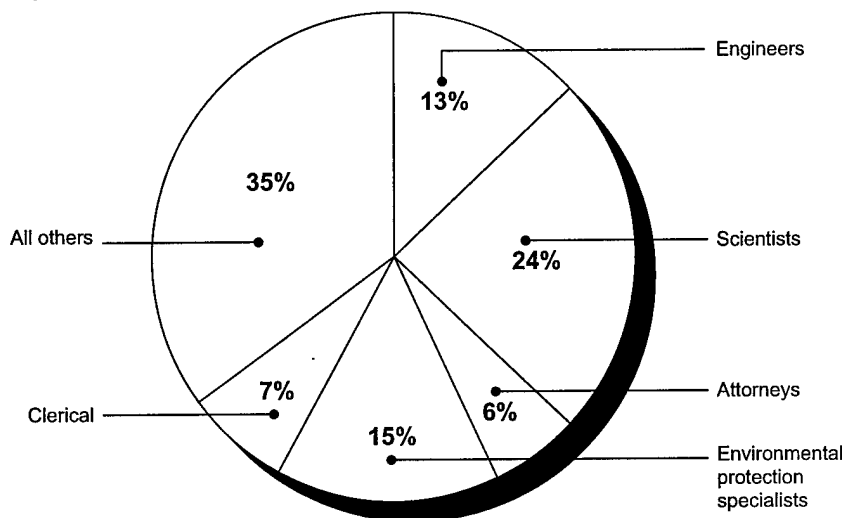
**Figure 1: EPA's Total FTEs, Showing Headquarters and Regional FTEs, Fiscal Years 1990-99**



Source: EPA.

EPA's employees possess a wide range of educational backgrounds and skills. Figure 2 shows the occupations that represent the largest part of the agency's workforce. EPA also makes extensive use of contractors to perform its work. The agency estimates that it would need an additional 11,000 to 15,000 employees if it did not receive appropriations to fund contractors. Thus, EPA's workforce must be adept both at delivering services directly and at effectively managing the cost and quality of mission-support services delivered by third parties on the government's behalf.

Figure 2: EPA Employees by Major Occupational Category, as of September 30, 1999



Source: EPA.

The Government Performance and Results Act of 1993 (the Results Act) requires EPA and other federal agencies to set goals, measure performance, and report on their accomplishments as a means of achieving results. Effective implementation of performance-based management, as envisioned in the Results Act, hinges on senior managers' willingness and ability to strategically manage all of the agency's resources—including human capital—to achieve missions and goals. Specifically, this requires aligning strategic and program planning systems with an explicit workforce planning strategy that includes (1) identifying the current and future competencies needed and any gaps, (2) developing a workforce action plan designed to address the gaps, and (3) monitoring and evaluating the workforce planning actions taken. Workforce planning is a key component of a human capital self-assessment checklist we published as a discussion draft last September.<sup>2</sup> (See attachment I.)

<sup>2</sup> Human Capital: A Self-Assessment Checklist for Agency Leaders (GAO/GGD-99-179, Sept. 1999.)

## **EPA Does Not Now Have a Workforce Planning Strategy to Assess Its Human Capital Requirements**

Although EPA's senior managers are closely involved in decisions concerning the agency's annual budget requests for staffing, the agency has not developed and implemented a workforce planning strategy to systematically and comprehensively assess its human capital requirements. Consequently, EPA cannot determine whether it has the appropriate number of people and competencies needed to effectively carry out its strategic goals and objectives. Furthermore, although EPA collects cost-accounting data on the amount of time its employees spend in carrying out the agency's strategic goals and objectives, it has not assessed the accuracy of the data. Thus, EPA lacks assurance that its employees are being used in ways that are consistent with the intent of its congressional appropriations legislation, which identifies the number of FTEs approved for each strategic goal and objective.

During most of the 1980s, EPA used a workload model for calculating the total number of FTEs needed and for allocating them among its various headquarters and regional offices. The model was based on studies of the amount of time required to perform key functions of the agency. The agency used the model to allocate its staff among its various organizational units but did not use it for determining the number of employees. An EPA official explained that the number of employees needed, according to the model, consistently exceeded the personnel ceilings established for the agency by the Office of Management and Budget. In 1987, EPA froze the workload model because it believed it was spending an inordinate amount of time each year negotiating the distribution of marginal staffing increases. Although the model continued to be used for allocating staff resource levels into the early 1990s, it was not updated to reflect new circumstances, became outdated, and was discontinued.

EPA's current process for preparing its budget request involves identifying funding and staffing increases, ("investments") in areas it considers to be priorities, which are usually offset by decreases, ("disinvestments") in areas of lower priority. For example, for fiscal year 2000, EPA identified investments totaling 311 FTEs and the same number of

disinvestments. Increases were identified for program priorities such as clean air, climate change, information management, and children's health. To accommodate the increases, decreases were identified in other agency activities, such as those for assessing chemical risks, enforcing clean water regulations, and cleaning up contaminated waste sites. Through such reallocations, EPA focuses on the number of staff available and does not consider the types of skills needed for program activities. We did not review the basis for EPA's decisions on the reallocations.

After the Congress reviews EPA's budget request and appropriates resources to the agency, senior officials allocate the available FTEs to EPA's organizational units. Because EPA does not have a system in place to assess its human capital requirements and to allocate resources accordingly, the allocations are based primarily on the number of FTEs that were allocated in previous years, with increases or decreases made incrementally to reflect the agency's "investments" and "disinvestments." However, an approach based on historical data may not accurately reflect the conditions facing EPA today and those likely to face it tomorrow. For example, over the past decade, technological changes have had a major impact on the skills and technical expertise needed to carry out federal programs. In addition, changes have occurred in EPA's regional environmental responsibilities as states have accepted more responsibility for the day-to-day implementation of federal environmental statutes. For example, in 1993, only eight states had accepted responsibility under EPA's delegation process for implementing provisions of the Safe Drinking Water Act. By 1998, 36 states had done so. The Environmental Council of the States, an association representing state environmental administrators, has pointed out that the states now assume responsibility for more than 75 percent of federal environmental programs. Such changes may reduce EPA's activities in some areas, such as carrying out inspections, but may in turn create the need for additional people and competencies in other areas, such as providing technical assistance and reviewing and measuring the effectiveness of state programs.

Fact-based human capital management requires data on how EPA's current workforce spends its time. However, the agency's efforts to account for the time spent to carry out



its various tasks have been hampered by inaccuracies in existing data. For example, although each of EPA's regional employees is assigned to a specific work area, such as pollution prevention or groundwater protection, the employees may be directed to perform tasks in other areas. In a September 1996 report, EPA's Inspector General stated that in two regions reviewed, employees spent a significant amount of time working in areas unrelated to the program areas to which their time was charged. In October 1998, EPA modified its cost-accounting system to account for tasks related to its strategic goals and objectives. EPA officials told us that the accuracy of the data collected under the new system has not been assessed, although they said the agency recognizes the need to do so. Assessing the data is crucial for their use under the agency's plans to develop and implement a workforce planning strategy. For example, an official representing EPA's Office of Enforcement and Compliance Assurance, which relies extensively on regional employees to carry out its functions, told us that it is important that the office have an accurate system of accounting for time spent in order to determine appropriate personnel levels.

### **EPA Has Begun to Develop and Implement a Workforce Planning Strategy**

EPA's decentralized organizational structure and the size and deployment of its workforce have long been issues of concern among outside reviewers of the agency. For example, in an April 1995 report to the Congress, the National Academy of Public Administration (NAPA)<sup>3</sup> commented that EPA has little data to determine the day-to-day activities of its regional employees. NAPA recommended that EPA complete an analysis of the activities of the regional offices, determine their appropriate size, and add or reduce staff accordingly.

During the past decade, EPA has attempted to improve its workforce planning but has fallen short of implementing an effective strategy for doing so. As previously mentioned, EPA stopped using its workforce analysis model in the early 1990s, partly because the model required more resources than EPA considered appropriate to spend. For fiscal

---

<sup>3</sup> NAPA is a nonprofit, nonpartisan, collegial organization chartered by the Congress to improve governance at all levels—federal, state, and local.

years 1995 through 1997, the agency conducted annual surveys to analyze the human capital needed to achieve its mission. Once each year, employees estimated the time they spent on various tasks for the first several months of the year and projected how they would spend their time during the remainder of the year. The purpose of the survey was to gain an understanding of where the workforce was deployed, ensure that the budget reflected this deployment, and make certain that resources were directed toward high-priority objectives and performance goals.

EPA officials told us that the survey was discontinued after fiscal year 1997 because of data collection flaws that caused EPA to lose confidence in the validity of the survey data. They said that the survey did not clearly define terms and reporting requirements, causing inconsistencies in the data reported by various employees and organizational components. In analyzing the results of the 1997 survey, EPA found that the workforce data differed substantially from the data reported to the Congress in EPA's fiscal year 1997 operating plan. For example, the survey data showed that the amount of time spent on activities of the Office of Enforcement and Compliance Assurance was 23 percent less than the amount reported by EPA in its operating plan, whereas the time spent on activities of the Office of Policy, Planning, and Evaluation was nearly three times the amount reported in the plan.

EPA has recently attempted to address the need for a more credible strategy to determine its workforce requirements. In June 1998, EPA initiated a project to assess and act upon the implications of strategic change for the agency's workforce. Through this project, which was completed in May 1999, EPA (1) developed a workforce profile identifying the competencies of the people employed by the agency and (2) estimated what competencies it would need in the future under various scenarios. By comparing the current workforce with estimated future needs, EPA identified potential gaps.

While the workforce assessment was a step in the right direction, it was a limited measure toward needed actions to implement a workforce planning strategy capable of meeting the agency's diverse goals and objectives. For example, the assessment focused

on the competencies, such as communication and computer skills, needed to carry out EPA's missions. However, the study was not designed to determine how many employees needed such competencies or how employees should be deployed among strategic goals and objectives, across program areas, and in various areas of the country. Furthermore, although EPA has identified the competencies that it believes are vital and difficult to obtain and maintain, it has not used this information to develop an integrated workforce strategy for recruiting, developing, and maintaining needed competencies in its current and future workforce.

EPA had intended to build on its workforce assessment by developing and implementing a workforce planning strategy to (1) continually monitor and assess its workforce in light of internal and external environments and (2) monitor and evaluate workforce actions taken. Although EPA had contracted for the development of the strategy, EPA officials terminated this work in February 1999, citing budget constraints. Nevertheless, the director of EPA's Office of Planning, Analysis, and Accountability told us that, while the agency currently has no resources allocated for implementing a workforce planning strategy, it recognizes the need to complete the job. He said that EPA is considering linking a workforce planning initiative to its strategic planning efforts. However, little time remains for implementing a workforce planning strategy before EPA's current strategic plan is scheduled to be revised and issued by September 2000.

EPA officials told us that in terminating the contractor's work for the development of a workforce planning strategy, EPA decided to develop such a strategy itself. Such an initiative is being considered under the auspices of EPA's Human Resources Council, which consists of senior managers in EPA's headquarters and regional offices. At the direction of the Council, a multifunctional group of program office executives and representatives of EPA's Office of Human Resources and Organizational Services has prepared a draft strategic plan for human resources. The plan calls for securing essential competencies through a workforce planning strategy aimed at recruiting and developing staff and providing incentives to retain highly competent employees. EPA officials told us that this strategy in essence would continue the efforts that EPA had planned to do

under the contract. The Human Resources Council is scheduled to meet in April 2000 to discuss the plan.

### **Observations**

The growth in EPA's personnel levels during the past decade has been accompanied by substantial changes in the roles and responsibilities of the agency and its state partners. In addition, technological advances during this period have provided opportunities for efficiencies to carry out the agency's strategic goals and objectives. While EPA has implemented several initiatives during the past decade to gain a fuller understanding of the demands facing its workforce, these initiatives have not received the resources and senior management commitment needed to bring them to fruition, and they have fallen short of their objectives. Without a workforce planning strategy, EPA is not able to identify the size of its workforce and the competencies that need to be deployed among its organizational components to effectively and efficiently carry out its strategic goals and objectives.

EPA's current efforts to develop and implement a human resources strategic plan, including a workforce planning strategy that is focused on continually monitoring and assessing its workforce and evaluating the effectiveness of actions taken, is a step in the right direction. If the plan is adopted, its ultimate usefulness will depend largely on the extent to which EPA's senior management remains committed to and provides the resources needed to ensure its success. Furthermore, as part of its workforce planning strategy, EPA will need to ensure that it collects and analyzes accurate data on the amount of time being spent on various programs and activities. Without such data, EPA cannot accurately determine the costs of carrying out its strategic goals and objectives and ensure that its workforce is being used in ways that are consistent with the intent of its congressional appropriators. In addressing these concerns, it is important that EPA identify the resources that would be necessary to implement a workforce planning strategy and to assess the accuracy of its cost-accounting data on the amount of time employees spend in performing tasks related to the agency's strategic goals and objectives.

-----

We performed our review from October 1999 through March 2000 in accordance with generally accepted government auditing standards. If you have any questions about this statement, please contact me on (202) 512-6111. Major contributors to this statement were Ed Kratzer, Bill Roach, Ken McDowell, and Rosemary Torres-Lerma.

## ATTACHMENT I

### THE HUMAN CAPITAL FRAMEWORK

We recognize that there is no single recipe for successful human capital management. But we have identified a number of human capital elements and underlying values that are common to high-performance organizations in the public and private sectors. The five parts of the human capital framework are as follows:

1. Strategic Planning: Establish the agency's mission, vision for the future, core values, goals, and strategies.
2. Organizational Alignment: Integrate human capital strategies with the agency's core business practices.
3. Leadership: Foster a committed leadership team and provide continuity through succession planning.
4. Talent: Recruit, hire, develop, and retain employees with the skills for mission accomplishment.
5. Performance Culture: Enable and motivate performance while ensuring accountability and fairness for all employees.

### **Orders by Internet**

For information on how to access GAO reports on the Internet, send an e-mail message with "info" in the body to

[info@www.gao.gov](mailto:info@www.gao.gov)

or visit GAO's World Wide Web home page at

<http://www.gao.gov>

### **To Report Fraud, Waste, and Abuse in Federal Programs**

Web site: <http://www.gao.gov/fraudnet/fraudnet.htm>

E-mail: [fraudnet@gao.gov](mailto:fraudnet@gao.gov)

Automated answering system: 1-800-424-5454